

frontonasal broader than long, forming a broad suture with the rostral and with the frontal; prefrontals small; four supraoculars; seven supraciliaries; frontoparietals distinct, much larger than the interparietal, behind which the parietals form a suture; a pair of nuchals; third and fourth upper labials under the eye. Ear-opening small, with six interlocking pointed lobules within the meatus, three pointing downwards and three pointing upwards. 22 subequal smooth scales round the body. A pair of feebly enlarged præanals. Fore limb, stretched forwards, reaching the ear; hind limb half as long as the distance between axilla and groin. Digits short; 12 smooth lamellæ under the fourth toe. Tail rather thick, once and two thirds the length of head and body. Brown above, yellowish beneath; sides dotted with black.

	millim.
Total length.....	167
Head	11
Width of head	7
Body.....	49
Fore limb.....	10
Hind limb	16
Tail	107

A single specimen from the foot of Mount Kenia. Presented to the British Museum by Lord Delamere.

XXII.—*On a new Species of the Genus Alepas (A. Lankesteri), from the Collection of the British Museum.* By A. GRUVEL, Chargé de Cours à la Faculté des Sciences de Bordeaux.

[Plate VIII.]

DIAGNOSIS.—Capitulum swollen laterally, covered with a thick transparent cuticle, without plates. Orifice slightly tubular and projecting. No crests on the median dorsal line, but a slight continuous ridge extending from the orifice to the peduncle.

The peduncle is nearly as long as the capitulum, without visible ornamentation, with the exception of irregular transverse folds.

Mandibles with four teeth. Inner branch of the 5th and 6th pairs of cirri atrophied and unequal.

Distribution.—West Indies, Mona Channel, 814 fathoms. Collected by Captain Cole. British Museum Collection.

Capitulum.—The capitulum, entirely devoid of plates, is covered with a thick chitinous envelope, extremely transparent even after prolonged immersion in alcohol, and ornamented with transverse folds which are especially numerous near the orifice. It is swollen towards the median and lateral regions, and then strongly retracts to form a kind of short, tubular duct in which the cirri are set. The capitulum has no dorsal crests, but simply a slight continuous ridge which follows the median dorsal line from the opening of the capitulum to the commencement of the peduncle.

Seen in profile, the general form of the capitulum is that of a semicircle, of which the anterior part, forming the base, is straight, and the posterior part regularly curved.

The dimensions of the capitulum of the largest specimen are as follows:—Height 20 mm., breadth 18.50 mm., thickness 8.5 mm.

Peduncle.—The peduncle continues the capitulum without a break. At first broad, it contracts and is almost cylindrical towards its middle part; then it broadens again to its base to form its surface of attachment. The cuticle is the direct prolongation of that of the capitulum.

This cuticle of the capitulum and peduncle presents some interesting features. It is composed of chitinous processes separated by somewhat irregular spaces. Some are wide at their base, and their summit terminates in three or four pointed branches which are recurved and divergent, forming hooks (Pl. VIII. fig. 2); others are shorter and simply conical (fig. 3). These processes have nearly the same height in the same zone, and this height varies from 4.8μ to 24μ . Near the middle of each of these zones is a sensory bristle receiving at its base a nerve-filament which is very distinct, long, slender, and terminates in a fine point. The average length is from about 95 to 100μ (fig. 4).

In general each zone of many-pointed hooks is surrounded by a zone of conical spines, and it is usually also in the zone of hooks that the sensory bristle is placed.

The opening of the capitulum is heart-shaped, presenting on the median dorsal line a circular protuberance delimitating a depression and not a true canal.

Mantle.—The mantle which clothes the chitinous cuticle on the interior is composed of the usual two epithelial layers, including between them two muscular layers, the one longitudinal, the other oblique, crossing at various angles and together forming a kind of very elegant tessellation, these bundles being separated one from another by a distance of about 70μ . There is, moreover, quite a system of branching

elastic fibres, obliquely binding the epithelial surfaces one to the other.

The chitinous cuticle which clothes the inner part of the mantle is thin, transparent, and interspersed with comb-shaped chitinous ornaments with a greater or less number of teeth, sometimes one only, irregularly placed and serving to retain the ovigerous sac in the intrapallial cavity.

Mouth.—The labrum has on its free margin fourteen short, strong, and blunt chitinous teeth, separated into two series of seven by a smooth space; the lateral parts are furnished with stiff and short but fine bristles.

The *palpi* are flattened and provided with long barbed bristles over about half their length (fig. 5).

The *mandibles* have four strong teeth on their free margin. The distance between the first and second slightly exceeds that between the points of the second and fourth (fig. 6).

The median dorsal region is covered with short, stiff, but rather fine bristles; the lateral faces of the teeth are furnished with strong, short, and pointed bristles, especially well developed in the vicinity of the last three teeth.

The *maxillæ* have the free margin divided into two unequal parts by a deep notch. The upper part is furnished with a very strong chitinous tooth, which continues the dorsal margin, and a smaller one. The lower part is scalariform and bears three short and thick projections, between which are finer bristles, uniformly not barbed, which likewise cover the lateral parts of the maxilla (fig. 7).

The *labial palpi* of the lower lip are broad, nearly square in shape; the anterior free margin is divided by a notch into two unequal parts, the upper part about three times as broad as the lower. The upper dorsal region of the palp is covered with long fine bristles collected in a thick tuft. These bristles become shorter and stiffer on the lower parts. Finally, on the posterior part are irregular bristles, bent and few in number (fig. 8).

Cirri.—The cirri are generally very long, covered with long fine bristles, especially long towards the free extremity of the rami. The first pair is somewhat sharply separated from the others.

1st pair.—This is much the shortest. The two rami are unequal. The anterior ramus, formed of 13 rather short joints (the basal joint being almost equal to four ordinary joints), bears numerous long, fine, and barbed bristles on its posterior border; these being much fewer on the anterior border. The posterior ramus is formed of 21 joints (the first being nearly equal to four ordinary joints). The hairs

are longer than those of the anterior ramus and the terminal joints are thinner, while keeping about the same length.

2nd pair.—The rami are nearly equal to each other and about twice as long as the posterior ramus of the first pair; that is to say they attain 12 millim. with 50 to 55 joints, the joints at the base not being very distinct. These segments are short, straight, and each bears some long anterior bristles and some shorter and finer posterior bristles only at the border of the segments.

The *3rd* and *4th pairs* are almost exactly similar to the *2nd*.

The *5th pair* has the inner ramus atrophied. The length of this ramus does not exceed 3.5 to 4 millim.; the number of joints is 19, long and slender towards the extremity, bearing some long fine bristles on the anterior margin and two or three very short bristles on the posterior margin, at the border of the segments. The normal ramus is similar to the preceding.

Finally, the *6th pair* of cirri have also the inner ramus atrophied, similar to the preceding, however, but shorter (16 joints) (fig. 10).

Caudal appendages.—These are long, slender, and cylindrical (1.5 millim. in length, with 10 joints). The basal joints are very broad compared with the superior (fig. 9). The last joint is furnished with fine bristles longer than itself; but these diminish rapidly in length as they approach the base until they become simple spines.

Filamentary appendages.—A single very short pair at the base of the first pair of cirri.

Penis.—The penis, which is about 4.5 millim. in length, is nearly regularly cylindrical, terminating at its extremity in a blunt point (fig. 11). It is covered with a thin transparent cuticle having annular parallel folds in the depressions, between which are placed, quite irregularly, long fine bristles more or less bent, which form at the apex a somewhat irregular tuft.

This new species, to which I propose to attach the name of the Director of the British Museum, approaches in some of its characters *A. cornuta*, Darw., and *A. japonica*, Aurivillius, but it has most affinity with the first-mentioned species.

Bordeaux,
7 May, 1900.

EXPLANATION OF PLATE VIII.

Fig. 1. *Alepas Lankesteri*, sp. n.

Fig. 2. Hook-shaped processes on the cuticle of the capitulum.

Fig. 3. Conical processes on ditto.

- Fig. 4. Sensory bristles situated in the midst of the preceding structures.
 Fig. 5. Left palp.
 Fig. 6. Right mandible.
 Fig. 7. Left maxilla.
 Fig. 8. Right labial palp.
 Fig. 9. Caudal appendages.
 Fig. 10. Cirrus of the 6th pair of cirri.
 Fig. 11. Penis (free extremity).

XXIII.—*Two Spiders new to the British Fauna.* By GEORGE H. CARPENTER, B.Sc. Lond., of the Science and Art Museum, Dublin.

DURING the past few years I have received consignments of spiders for identification from Mr. A. Randell-Jackson, of Southport, collected by him in various parts of Northern England and the Isle of Man. Many of his captures are of considerable faunistic interest, and these will be duly recorded in local lists. Two species, however, are of particular importance, being undoubtedly additions to the British fauna, and one of them seems to be new to science. Both were obtained in the neighbourhood of Southport.

Family Agelenidæ.

Genus AGELENA, Walck.

Agelena longipes, sp. n. (Figs. 1-5.)

Female.—Length 12·5 millim.; length of carapace 5·5 millim.; breadth 4 millim.; length of legs i., ii., iii., iv. respectively 20, 18·5, 18, 24 millim.

Eyes of hind row equal to each other; centrals a diameter apart, each lateral a diameter and a half from its neighbouring central. Front lateral eyes of same size as hind laterals, which they almost touch, each a diameter from neighbouring front central. Front centrals larger than the other eyes, half a diameter from each other, a diameter from the hind centrals (figs. 2, 3).

Epigyne forming a simple deep rounded depression, broader than long, with thickened edges; a dark horseshoe-shaped area in front of it (fig. 4).

Upper spinnerets with the terminal segment flattened and pointed and fully twice as long as the proximal (fig. 5).

Carapace yellowish brown, with a fine black marginal line and a broad brown band with black markings on either